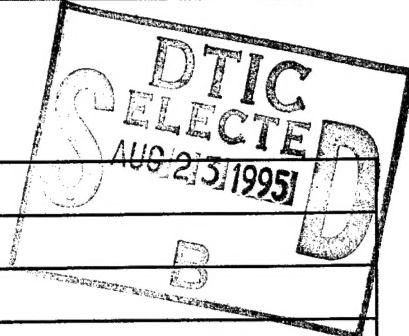


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NAVAL WAR COLLEGE
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WHAT WILL BE THE CHARACTER OF THE NEXT WAR?

by

Mark S. Welch
CDR USN

A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature:

Mark S. Welch

March 1995

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Abstract of

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The world is undergoing a fundamental transformation as knowledge generation replaces industrial capacity in the way wealth and power are generated. Nations achieve the object of war by pursuing a strategy which lays somewhere along a spectrum of possibilities between attrition and relational-maneuver. Attrition employs forces directly against enemy strengths in order to cumulatively defeat him by destroying his forces. Relational-maneuver, on the other hand, deliberately avoids enemy strengths, aiming instead to apply some selective strength to an enemy weakness. The paradigms of Clausewitz and Sun Tzu are compared to the context of their times and the two most associated approaches to war. Sun Tzu's "weaker" force perspective employs operational art to generate force multiplying effects. Clausewitz's annihilation perspective is focused on dominating the tactical battlefield. Americans have pursued an attrition paradigm for the past century due in large part to industrial success. Current circumstances suggest a conscious effort will be required to break out of the attrition paradigm; but there is little alternative if we are to remain effective in future wars in the information age.

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Introduction.

The 5 June 1993 attack by forces of Mohammed Farah Aideed on Pakistani soldiers of the United Nations peacekeeping force in Somalia (UNOSOM II) directly caused the deaths of twenty-four soldiers. The events which unfolded over the next four months culminating in President Clinton's announced decision on 7 October 1993 to withdraw U.S. forces from Somalia are hard to understand¹. While it is tempting to rationalize these events in terms of policy and principles of operations other than war, incorporate the lessons learned, and move on; the considerable friendly casualties and inability of U.N. (including a U.S. component) forces to dominate the theater suggest larger factors could be at play.

It is commonly recognized both inside and outside the military culture that our world is undergoing a fundamental transformation as knowledge generation replaces industrial capacity in the way we generate wealth and power. But we can't easily predict what kind of world will result since our vision, based on industrial age experience, does not easily extrapolate beyond the discontinuity which separates the present from the not so distant future.² Regardless of the certainty of uncertainty, perhaps common frameworks exist within which changes occur, even in revolutionary times. A strategy used by the commercial sector to recognize and take advantage of change in this explosively competitive environment suggests we step back and consider our mission and methods from "outside the box", since our institutional paradigms may cloud our

¹The Army-Air Force Center for Low Intensity Conflict, White Paper: An analysis of the Application of the Principles of Military Operations Other Than War (MOOTW) in Somalia (U), February 94.

²Toffler, Alvin The Third Wave (New York: Bantam, 1981), pp. 127-130

ability to see and react to the opportunities afforded by change. In recognition of the "substantial cost for failure to recognize revolutionary changes in warfare before an opponent does"³, we must try to anticipate the future look of war, its component parts, and the military means we may need to prevail. To do that, we must start with our object and the paradigms which frame our approach to war.

US Army doctrine states "The military purpose of war is destruction of the enemy's armed forces and will to fight."⁴ Two approaches are identified by Edward Luttwak for achieving our end; attrition and relational-maneuver. The former, sometimes referred to as the direct approach, attempts to defeat the enemy by cumulative destruction of his armed forces and elimination of their sources of supply and support. The latter, also known as the indirect approach, intentionally avoids confrontation with enemy strengths, seeking to prevail instead by achieving a systemic disruption which paralyzes the enemy's ability to resist. Which approach armed forces take in waging war is influenced by their history, their national means, and culture. The current American paradigm, formed over the course of the twentieth century, favors the direct approach; and it colors every facet of how we see the world.⁵ But a review of the two basic paradigms suggests the opportunities offered by the knowledge revolution may be more easily exploited by powers possessing a "weaker" point of view. The vantage of the paradigm perspective suggests a conscious effort to transform our attrition approach to war may be required in order to conduct effective military operations in the information age.

³Fitzsimonds, James and others, "Revolutions in Military Affairs," Joint Force Quarterly, Spring 1994, p. 28.

⁴U.S. Department of the Army, FM 100-5 Operations (U), (Washington: 17 Jun 1993), p. 2-4.

⁵Luttwak, Edward, "The Operational Level of War," in Operational Level of War--Its Art, (Carlisle, PA: U.S. Army War College, 1985), p. 4-24.

"Therefore I say: "Know the enemy and know yourself; in a hundred battles you will never be in peril. When you are ignorant of the enemy but know yourself, your chances of winning and losing are equal. If ignorant both of your enemy and of yourself, you are certain in every battle to be in peril."⁶

Sun Tzu, ~ 500 B.C.

Attrition.

Kill, crush, destroy, annihilate, obliterate, eliminate. There is a rich variety of words in our language to describe the goal of an attrition approach to war. This is the style of war we have perfected through the industrial age. It is the focus for the style of war Clausewitz offered in his now classic "On War". "...no matter what the central feature of the enemy's power may be--the point on which your powers must converge--the defeat and destruction of his fighting force remains the best way to begin, and in every case will be a very significant feature of the campaign."⁷

The object of a purely attritive approach is to eliminate the enemy's ability to fight by destroying his armed forces. Luttwak describes the attrition paradigm in terms of its goal and

⁶Sun Tzu, The Art of War, tran. Griffith, Samuel, (London: Oxford University Press, 1971), p. 84.

⁷Clausewitz, Carl, On War, trans. Michael Howard and others, (Princeton, NJ: Princeton University Press, 1984), p. 596.

component parts.⁸ It sets out to attack the enemy where he is strong in order to maximize the aggregation of targets. Reconnaissance, movement, and logistics are focused to move forces to a position from which they can bring overwhelming firepower to bear. Each set of targets is destroyed by cumulative firepower. Measures of effectiveness are defined in terms of efficiency in destroying enemy forces. The key is to achieve overall superiority in net attritive power; victory being gained through cumulative success in tactical engagements.

The attrition approach is particularly well suited to industrial societies; whose cultures think and see the world in terms of standardization, specialization, concentration, maximization, and centralization.⁹ It features simplicity and predictability. All military activity in peace and war can be focused solely on optimizing the processes which contribute directly to the attritive goal, to achieve the maximum level of destruction of enemy forces in the minimum time. And the same technological leaps which are the basis of competition between industrial powers fits hand-in-glove with the military drive to maintain a destructive edge over potential adversaries.

Relational-Maneuver.

Sun Tzu explained the advantage of relational-maneuver. "Therefore, against those skilled in attack, the enemy does not know where to defend, against the experts in defense, the enemy does not know where to attack."¹⁰ The goal of relational-maneuver is to produce systemic disruption.

⁸Luttwak, "The Operational Level of War," pp. 4-22, 4-23.

⁹Toffler, The Third Wave, pp. 46-60.

¹⁰Sun Tzu, The Art of War, pp. 96,97.

It is sometimes referred to as the indirect approach to war. Whereas the attrition approach deliberately seeks to engage the enemy where he is strong, thereby maximizing target concentration; the relational-maneuver approach seeks avoidance of enemy strengths, and instead achieves its object by application of "some selective strength against a known dimension of enemy weakness".¹¹ The destruction of the enemy force is not a goal of relational-maneuver.

The relational-maneuver approach can potentially yield results far exceeding the level which would normally result from direct application of the same level of strength due to the systemic nature of the attack. According to U.S. Army doctrine, maneuver achieves "surprise, psychological shock, physical momentum, massed effects, and moral dominance."¹² The disruption caused by successful maneuver creates opportunities which can be exploited by subsequent operations. Flexibility and initiative are required to exploit opportunities as they occur.

The potential of disproportionately high returns from a relational-maneuver approach are accompanied by much higher risk than from an equivalent attrition approach. Whereas an attritive operation is unlikely to suddenly end in catastrophe due to its cumulative nature, a badly conceived application of relational-maneuver can lead to disaster. Indeed, the success of this approach depends on knowing a lot about your enemy and his disposition and keeping him from knowing about you. Risk is reduced by understanding the inner workings of the enemy's systems.¹³ Information is used to create knowledge which in turn is used to defeat the enemy

¹¹Luttwak, The Operational Level of War, p. 4-23.

¹²FM 100-5 Operations, p. 2-10.

¹³Luttwak, The Operational Level of War, p. 4-24.

(and keep him from gaining the upper hand on us). The capability to attack targets with precision guided munitions is only a force multiplier if the targets which are attacked are strategically relevant.¹⁴

Two Masters, Two Paradigms, One Spectrum of War

Both attrition and relational-maneuver have been known and used as a means to achieve victory throughout the recorded history of warfare. Sun Tzu, whose writings date from about 500 B.C., is an obvious proponent of the relational-maneuver approach. "He whose advance is irresistible plunges into his enemy's weak positions."¹⁵ He also considers the more direct approach when supported by favorable estimates of the enemy's strength.¹⁶ Clausewitz, on the other hand, was a firm believer in the direct approach; "We do claim, however, that direct annihilation of the enemy's forces must always be the *dominant consideration*."¹⁷ and discounts the indirect approach as having little utility.¹⁸

¹⁴Guilmartin, John, "Technology and Strategy: What Are the Limits?," Lecture, U.S. Army War College, Carlisle, PA: 20 July 1994, pp. 36-37.

¹⁵Sun Tzu, The Art of War, p. 97.

¹⁶Ibid., p. 122. ["It is sufficient to estimate the enemy situation correctly and to concentrate your strength to capture him. There is no more to it than this. He who lacks foresight and underestimates his enemy will surely be captured."]

¹⁷Ibid., p. 97.

¹⁸Clausewitz, On War, p. 515. ["Now we must deal with a particular effect it [strategic maneuver] has on operations: the fighting forces are often diverted from the important roads and towns to remote or at any rate unimportant areas. Where matters are determined by minor interests of a temporary nature, the influence exerted on the conduct of war by major topographical features will become less important. The fighting forces may be shifted to places where the plain overall needs of the war would never lead them; consequently the course of the war will take much greater twists and turns in its details than in wars leading to a great decision."]

In his comparative study of the writings of Sun Tzu and Clausewitz, Michael Handel dismisses the apparent contradiction between their two points of view as two sides of the same coin; "in fact the two strategists are approaching the same issue from different perspectives."¹⁹ Accepting that their perspectives lie on opposite sides of some common ground suggests the idea that a spectrum of warfare paradigms exists; fixed at the ends by relational-maneuver and attrition. We may now ask why the paradigms of these two master strategists gravitate towards opposite sides of this spectrum. The answer is revealed when their sage advice is taken in the context of their times.

Clausewitz's Paradigm

The basis for "On War" emerged from Clausewitz's historical observations and personal experiences over the period leading up to and through the French revolution. The technology which comprised the battlefield had been stagnant for some fifty years.²⁰ Clausewitz viewed the world from a post "Age of Enlightenment" vantage; a period racked by social change, which witnessed the collapse of the feudal system and the rise of the commoner.²¹

Clausewitz criticized the feudal style of war in the period prior to Napoleon for having achieved the level of a strategic game; which he observed suffered from being

¹⁹Handle, Michael, Sun Tzu & Clausewitz Compared, (Carlisle, PA: Strategic Studies Institute, 1991), p. 5.

²⁰Britt, Albert, The Wars of Napoleon, ed. Greiss, Thomas, (Wayne, NJ: Avery Publishing Group, 1985), pp. 30-36

²¹ "The French Revolution," Encarta, Microsoft, 1994, (CD ROM Index B957)

constrained by balance, and sterile, and pointless--and incapable of producing a decision.

Napoleon's Grande Armee restored decision to the battlefield. Napoleons huge general conscription force, built on the innovative combined arms corps, changed the face of Europe.²² While strategy played a large role in Napoleons campaigns, the outcomes of his battles depended largely on his strategic schedule and standard operating procedures²³ to guide the engagement, since he was frequently unable to determine exactly where his enemy was located. What was lacking in operational art, was made up for in numbers.²⁴

Notably, Clausewitz's paradigm discourages a weaker force from attacking a much stronger force:

- a.) It discounts the force multiplying effects of intangible factors.²⁵
- c.) It bases success on superior numbers.²⁶

²²Britt, Wars of Napoleon, pp. 30-36

²³Ibid., pp. 33,34

²⁴Ibid., pp. 64. [Referring to his strategy for the battle at Thuringian Forest, Napoleon wrote to Marshal Soult, "you will understand that I am determined to hazard nothing and to attack the enemy wherever he may stand with double his strength."]

²⁵Clausewitz, On War, p. 529. [They should always be looked upon as minor investments that can only yield minor dividends, appropriate to limited circumstances and weaker motives.]

²⁶Ibid., pp. 528, 566-573. [Culminating point], pp. 194-195. [In tactics as in strategy, superior numbers are the most common element in victory.], [. . . superiority in numbers is the most important factor in the outcome of an engagement . . . It thus follows that as many troops as possible should be brought into the engagement at the decisive point. This is the first principle of strategy.]

Sun Tzu's Paradigm

"Art of War" is distilled from the bronze age history of conflicts between the warring states of Ch'u, Wu, and Yueh in China. It was a time marked by little technological growth. Chariots had recently been introduced by a neighboring state to Sun Tzu's maritime state of Wu, along with instruction in land warfare. The state of Ch'u was already well versed in land warfare and the use of chariots, having employed both with effect in battles with northern neighbors on the open plains in previous wars. The chariots had little impact on the conduct of wars between Wu and Ch'u, however, since the terrain was not favorable for their use and both states typically arrived at the battlefield via rivers. The population of Wu was generally satisfied with their leadership which attempted to "nurture them, increase the population, and stimulate their productivity."²⁷ The leadership of their larger adversary, Ch'u, whom they fought on and off in battle for 60 years, was brutal by contemporary standards, "exhausting and exploiting the energies of its inhabitants."²⁸ The wars with Wu were the latest in a period of incessant fighting for Ch'u.

Remarkably, despite being smaller, Wu was able to defeat the armies of Ch'u in every significant battle.²⁹ The Wu advantage, which the armies of Ch'u failed to discover during this period, was gained by developing a force based on the relational-maneuver war paradigm

²⁷Sun Tzu, The Art of War, tran. Sawyer, (Boulder, CO: Westview Press, 1994), p. 92.

²⁸Ibid., p. 91.

²⁹Ibid., p. 90. [After each defeat, the Ch'u leaders paused the fighting for extended periods, sometimes lasting five years, while they reassessed their organization and tactics and rebuilt and retrained their forces.]

described in "the Art of War". Wu generals realized they did not have the numerical advantage and could not afford to engage the Ch'u armies head on. Their attacks necessarily focused on speed and mobility, and benefited from deception, intelligence, and what we now recognize as operational planning--all key elements of relational maneuver. Sun Tzu viewed the world from the "weaker" force point of view; that is, to avoid a contest of numbers relying instead on avoidance, deception, and dominance of the intangibles for advantage.

Perfecting the War of Attrition

The same qualities which transformed society during the industrial age changed the way armies and their states approached the art of war in the industrial age. They are standardization, specialization, synchronization, concentration, maximization, and centralization.³⁰ The technological revolution which was enabled by them provided a steady stream of improved weapons with increased destructive capacity. The attrition paradigm based on Clausewitz's ideas, which were laid out before the effects of the industrial revolution could be seen, provided the plan industrial nations needed to direct their new power into war and compete for advantage in an arms race. "Since in war too small an effort can result not just in failure but in positive harm, each side is driven to outdo the other, which sets up an interaction."³¹

B.H. Liddell Hart, writing in 1925 with the horrors of trench warfare fresh in his mind, blamed the lasting scars of World War I on blind pursuit of the "false objective" which

³⁰Toffler, The Third Wave, pp. 46-60.

³¹Clausewitz, On War, p. 585

Clausewitz had proffered in a different era.³² Luttwak explains the motivating idea for Hart, Fuller and others, who strongly endorsed the development of the tank after World War I, was not the attraction of new technology, but the urge to avoid another bloody deadlock by moving beyond the tactical battlefield.³³ Their vision of an indirect approach paradigm would not come of age for another six decades; not until practical limits in industrial age technologies, which consistently evolved more effective ways to destroy the enemy at the tactical level, had been reached. He notes that with the exception of some isolated displays of action at the operational level in World War II, Korea, and Vietnam, which are attributed more to generalship than state of the operational art, planning and execution of operations were primarily at the strategic and tactical levels.³⁴ The effect of focusing planning and action on the tactical level, where the rubber meets the road in an attritive approach to war, is to develop an officer corps in which an understanding of operational art is the exception rather than the rule. In 1980, Luttwak pointed out, "It is not merely that officers do not *speak* the word but rather that they do not *think* or practice war in operational terms, or do so only in vague or ephemeral ways."³⁵

³²Hart, Liddell, Paris or the Future of War, (New York: E.P. Dutton, 1925) pp. 11,12. [Referring to Clausewitz's "On War", Hart offered; "Yet, despite his main miscalculations, he had a wider understanding of the objects of war than most of his disciples. Clausewitz did at least recognize the existence of other objectives besides the armed forces. He enumerated three general objects--the military power, the country, and the will of the enemy. But his vital mistake was to place "the will" last in his list, instead of first and embracing all the others, and to maintain that destruction of the enemy's main armies was the best way to ensure the remaining objects."]

³³Luttwak, The Operational Level of War, p. 4-21

³⁴Ibid., p. 4-22.

³⁵Ibid., p. 4-21.

Something Different Happened in the Gulf War.

By the time Iraq invaded Kuwait in 1989, speed, range, firepower, armor protection, and mobility would no longer yield evolutionary advances on the battlefield, establishing the knowledge based revolutionary premise discussed by the Toffler's War and Anti-War.³⁶ The Gulf War was a hybrid war from the point of view of direct and indirect approaches to war. The initial phase aimed to reduce the numbers of enemy tanks, guns, and troops, and to blind Iraqi forces using air power while the ground force deployed. A color coding system was used to chart the progress of the air operation. Red indicated enemy units which were above seventy-five percent strength, yellow below seventy-five but above fifty percent, and green (for go) for units which were attrited at least fifty percent. The goal was fifty percent attrition of the opposing force before launching the ground assault. Ground operations, on the other hand, incorporated relational-maneuver throughout to avoid enemy strengths. Deception, speed, and mobility were key aspects of the plan to upset Iraqi forces.³⁷ The resulting upset surprised everyone.

While the above is necessarily a simplification, then 7th Army Commander, General Crosbie E. Saint's reflection on the war is telling in regard to the effect of the attrition paradigm on our perceptions:

³⁶Toffler, Alvin and others, War and Anti-War, (Boston: Little Brown, 1993), pp. 29-32.

³⁷Summers, Harry, A Critical Analysis of the Gulf War, (New York: Dell, 1992), pp. 268-294.

Looking back, we should have known from the outset that the Iraqis were probably a pretty good tactical army, but not playing in our league. After all, Saddam spent his time talking about "the Mother of all battles", clearly a tactical event, while we were talking about the campaign, an operational set of sequenced events.³⁸

Easy to explain in hindsight, but not apparent at the time.

Conclusions:

America is the only remaining superpower in the "New World Order" and will arguably remain so for the foreseeable future.³⁹ The devastation of the Iraqi armed forces in the Gulf War provide clear warning of the fate which awaits a conventional force foolish enough to launch a direct attack on US vital interests. For this reason, we must be prepared to recognize and defend against indirect attacks on our interests, since the relational-maneuver paradigm affords a way to tip the balance of power in favor of the "weaker" power.

Whereas America rose to the top of the global pyramid in the industrial age by dominating the industrial sector, maintaining that position in the knowledge age may present a larger challenge. Two characteristics of knowledge which differentiate it from physical matter; such as guns, aircraft, and even money, make it more difficult to keep a decisive advantage on a

³⁸Ibid. p. 157.

³⁹Fitzsimonds, "Revolutions in Military Affairs", p. 27.

modern battlefield. Knowledge can be held and used by more than one person at a time, and the supply of it is inexhaustible.⁴⁰ Since relational-maneuver can generate large force multipliers, even small powers can become formidable opponents by mastering this art. It is fortunate that Saddam Hussein was not practiced in the operational art and built his forces to fight a war based on the attrition paradigm.⁴¹ We must be ever vigilant that the same paradigm which has served us well through the last hundred years can blind us to recognizing a different approach to war when it is used against us, or its opportunities when they knock.

Sun Tzu said, "In general, in battle one engages with the orthodox and gains victory through the unorthodox. Thus one who excels at sending forth the unorthodox is as inexhaustible as heaven."⁴²

⁴⁰Toffler, War and Anti-War, p. 59.

⁴¹Summers, A Critical Analysis of The Gulf War, p. 285. [Referring to his impressions of Saddam Hussein as a military strategist, General Schwarzkopf replied to his media questioner, "As far as Saddam Hussein being a great military strategist, he is neither a strategist nor is he schooled in the operational art, nor is he a tactician, nor is he a general, nor is he a soldier. Other than that, he's a great military man. I want you to know that."]

⁴²Sun Tzu, The Art of War, p. 187.

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